

NEW SPECIES OF *AMBLYPSELOPUS* AND *CONDYLOSTYLUS* FROM GUANGXI, CHINA (DIPTERA, DOLICHOPODIDAE)

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Abstract The following three species of Dolichopodidae from Guangxi are described as new to science: *Amblypsilopus apicalis* sp. nov., *A. digitatus* sp. nov., and *Condylostylus damingshanus* sp. nov.

Key words Diptera, Dolichopodidae, *Amblypsilopus*, *Condylostylus*, new species, China.

The genus *Amblypsilopus* is a large genus with 275 known species distributed worldwide, of which 45 species are known from China while the genus *Condylostylus* Bigot also is a large genus with 262 known species distributed worldwide, of which 26 species are known from China (Bickel, 1994; Yang *et al.*, 2006; Yang *et al.*, 2011). The Chinese *Amblypsilopus* and *Condylostylus* were revised by Yang *et al.* (2011). The major references dealing with the Oriental species of these two genera are Becker (1922), Bickel (1994), and Yang *et al.* (2011). Here 2 new *Amblypsilopus* species and one new *Condylostylus* species are added to the fauna of China. The type specimens are deposited in the Entomological Museum of China Agricultural University, Beijing (CAU). The following abbreviations are used: *acr* = acrostichal seta (e), *ad* = anterodorsal seta (e), *av* = anteroventral seta (e), *dc* = dorsocentral seta (e), *ih* = inner humeral seta (e), L I = fore leg, L II = mid leg, L III = hind leg, *npl* = notopleural seta (e), *oc* = ocellar seta (e), *ph* = posthumeral seta (e), *psa* = postalar seta (e), *pvt* = postvertical seta (e), *sa* = supraalar seta (e), *su* = sutural seta (e), *sc* = scutellar seta (e), *vt* = vertical seta (e).

1 *Amblypsilopus apicalis* sp. nov. (Fig. 1)

Diagnosis. Antenna black except first flagellomere dark yellow. Legs yellow except mid and hind coxae blackish, fore and mid tarsomere 5 and hind tarsomeres 3–5 dark brown. Hind tarsomeres 3–5 thickened. Male cercus enlarged apically; surstylus rather thick, trifurcated.

Male. Body length 3.0–3.3 mm, wing length 2.7–2.8 mm.

Head brightly metallic green with pale grey pollen. Hairs and bristles on head black except middle and lower postocular bristles including postero-ventral

hairs pale yellow; frons with 1 very long black anterior bristle on postero-lateral slope; one short *vt*. Ocellar tubercle with 2 very long strong *oc* and 2 short posterior hairs. Antenna black except first flagellomere dark yellow with dark brown dorsal surface; pedicel with circlet of short black apical bristles except 1 dorsal bristle and 2 ventral bristles slightly long; first flagellomere nearly trapezoid, slightly wider than long; arista shorter than head width, upper apical, blackish. Proboscis yellow with black hairs; palpus yellow with black hairs and 2 black bristles.

Thorax brightly metallic green with pale grey pollen. Hairs and bristles on thorax black; 2 long posterior *dc* and 3 hairs anteriad; 2 long irregularly paired *acr*; 1 *ih*, 1 *ph*, 1 *su*, 2 *sa*, 1 *psa*, 2 *npl*; scutellum with 2 long *sc*, basal pair absent. Legs yellow except mid and hind coxae blackish, fore and mid tarsomere 5 and hind tarsomeres 3–5 dark brown. Hind tarsomeres 3–5 thickened. Hairs and bristles on legs black, but those on coxae pale yellow. Fore coxa with 3 strong apical bristles, mid coxa with 4 apical bristles, hind coxa with 1 exterior bristle at base. Fore and mid femora with indistinct pale yellow hairs at base. Fore tibia without distinct bristles; apically with 3 bristles. Mid tibia with 1 *pd* and 2 *av*; apically with 3 bristles. Hind tibia with 6 *pd* and 4 *pvt*; apically with 3 bristles. Hind tarsomere 1 with 1 *v* at extreme base. Relative length ratio of tibiae and tarsomeres; L I 1.90:1.50:0.50:0.40:0.25:0.20; L II 2.50:2.00:0.55:0.40:0.25:0.15; L III 4.00:2.00:0.60:0.30:0.30:0.15. Wing nearly hyaline, veins dark brown. Vein *M*₁ basally curved. Crossvein *m-cu* nearly straight, *CuA*₁ ratio 1.0. Squama dark yellow with pale yellow hairs. Halter yellow.

Abdomen metallic green with pale grey pollen, but dark brown from segment 6 onward and genitalia dark yellow with dark brown apex. Hairs and bristles

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on abdomen black except those on sternite 2 and lateral portion of tergite 1 pale yellow. Male genitalia: epandrium distinctly longer than wide, genital foramen small (about 1/3 as long as epandrium); surstylus rather thick (nearly as wide as epandrium), about 1/3 as long as epandrium, trifurcated; cercus nearly as long as epandrium, apically enlarged.

Female. Body length 2.1–3.2 mm, wing length 2.1–2.8 mm. Similar to male, but abdominal tergites 1–2 mostly yellow and entire venter dark yellow to yellow.

Holotype male, Guangxi, Nanning, Damingshan, 24 May 2011, ZHANG Ting-Ting. Paratypes: 4 males, 3 females, same data as holotype.

Remarks. This species belongs to the *abruptus*-group and is somewhat similar to *A. sanyanus* Yang from Hainan, but can be separated from it by the hind tarsomeres 3–5 thickened, cercus not furcated and nearly as long as epandrium. In *A. sanyanus*, the hind tarsomeres 4–5 are thickened, the cercus is furcated and distinctly shorter than the epandrium (Yang *et al.*, 2011).

Etymology. The specific name refers to the dark brown tip of the tarsi.



Fig. 1. *Amblypsilopus apicalis* sp. nov., male genitalia, lateral view.

2 *Amblypsilopus digitatus* sp. nov. (Fig. 2)

Diagnosis. Fore tarsomere 5 flattened with plumose lateral hairs. Antenna yellow except pedicel dark brown. Arista distinctly longer than head width. Male cercus nearly finger-like.

Description. Male. Body length 4.5 mm, wing length 4.0 mm.

Head brightly metallic green with pale grey pollen. Hairs and bristles on head black except middle and lower postocular bristles including postero-ventral hairs pale yellow; frons with 1 anterior bristle on postero-lateral slope; 1 *vt*. Ocellar tubercle with 2 very long strong *oc* and 2 short posterior hairs. Antenna yellow except pedicel dark brown; pedicel with circlet of short black apical bristles except 1 dorsal bristle and 1 long bristle relatively long; first flagellomere nearly trapezoid, slightly wider than long; arista distinctly longer than head width, upper apical, blackish. Proboscis yellow with black hairs; palpus yellow with black hairs and 2 black bristles.

Thorax brightly metallic green with pale grey pollen. Hairs and bristles on thorax black; 2 long posterior *dc* and 3 hairs anteriorad; 2 long irregularly paired *acr*; 1 *ih*, 1 *ph*, 1 *su*, 2 *sa*, 1 *psa*, 2 *npl*; scutellum with 2 long *sc*, basal pair absent. Legs yellow except mid and hind coxae tinged blackish at base, all tarsomere 5 dark brown and apex of fore tarsomere 4 brown. Fore tarsomere 5 flattened with plumose lateral hairs. Hairs and bristles on legs black, but those on coxae pale yellow. Fore coxa with 3 strong apical bristles, mid coxa with 4 apical bristles, hind coxa with 1 exterior bristle at base. Fore tibia without distinct bristles, but with 1 brown posterior hair subapically; apically with 2 short bristles. Mid tibia with 1 *av* at middle; apically with 3 bristles. Hind tibia with 5–6 *pd* and 6 *pv*; apically with 3 bristles. Hind tarsomere 1 with 1 *v* at extreme base. Relative length ratio of tibiae and tarsomeres: L I 3.80:5.20:0.95:0.90:0.60:0.45; L II 4.8:4.0:1.1:0.6:0.4:0.2; L III 6.7:2.8:1.2:0.8:0.5:0.2. Wing nearly hyaline, veins dark brown. Vein *M*₁ basally curved. Crossvein *m-cu* nearly straight, *CuAx* ratio 1.3. Squama dark yellow with pale yellow hairs. Halter dark yellow.

Abdomen metallic green with pale grey pollen, except genitalia brownish yellow apically. Hairs and bristles on abdomen black. Male genitalia: epandrium distinctly longer than wide, genital foramen large (1/2 as long as epandrium); surstylus rather narrow (1/3 as wide as epandrium), 1/3 as long as epandrium, with finger-like apex; cercus nearly as long as epandrium, nearly finger-like.

Female. Unknown.

Holotype male, Guangxi, Nanning, Damingshan, 24 May 2011, coll. ZHANG Ting-Ting.

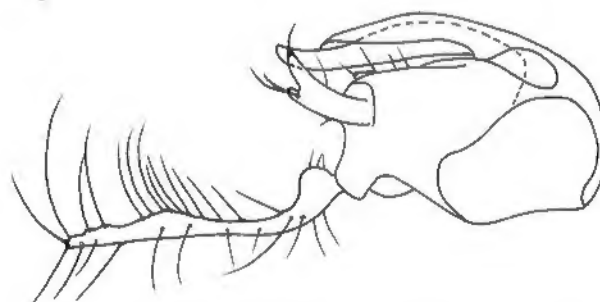


Fig. 2. *Amblypsilopus digitatus* sp. nov., male genitalia, lateral view.

Remarks. This species belongs to the *pallidicornis* group and is similar to *C. flavicercus* Zhu *et* Yang from Hainan, but can be separated from it by the first flagellomere nearly trapezoid, slightly wider than long, and fore tarsomere 1 distinctly longer than fore tibia. In *C. flavicercus*, the first flagellomere is triangular,

slightly longer than wide, and fore tarsomere 1 is shorter than the fore tibia (Yang *et al.*, 2011).

Etymology. The specific name refers to the digitiform apex of the surstylus.

3 *Condylostylus damingshanus* sp. nov. (Figs 3 – 4)

Diagnosis. Apical 1/6 of hind femur blackish. Fore and mid femora each with a row of pale yellow hair-like *pv* (longest *pv* longer than femur thickness). Fore tarsomeres 2 – 4 with a row of crocheted *pv*. Male cercus very long, nearly reaching base of abdomen.

Male. Body length 5.7 – 5.9 mm, wing length 5.6 – 6.0 mm.



Figs 3 – 4. *Condylostylus damingshanus* sp. nov., male. 3. Wing. 4. Genitalia, lateral view.

Thorax brightly metallic green with pale grey pollen. Hairs and bristles on thorax black; 5 long *dc*; 4 long irregularly paired *acr*; 1 *ih*, 1 *ph*, 1 *su*, 2 *sa*, 1 *psa*, 2 *npl*; scutellum with two pairs of long *sc*. Legs yellow except mid and hind coxae blackish with dark yellow tips, apical 1/6 of hind femur blackish, tarsi dark brown from extreme tip of tarsomere 1 onward. All tarsomere 5 weakly thickened. Hairs and bristles on legs black, but all femora with short pale yellow ventral hairs mostly located at base. Fore coxa with 3 strong apical anterior bristles and numerous short inner bristles, mid coxa with 7 – 8 apical anterior bristles, hind coxa with 1 exterior bristle at base. Fore and mid femora with row of pale yellow hair-like *pv* (longest *pv* longer than femur thickness). Fore tibia without distinct bristles; apically with 1 long *pd* and *pv* subequal in length. Mid tibia with 2 *ad* and 2 *pd*; apically with 3 bristles. Hind tibia with 6 – 8 short *pd* and 5 – 6 short *pv*; apically with 3 bristles. Fore tarsomere 1 with 3 long thin *pv* at base, tarsomeres 2 – 4 with row of crocheted *pv*. Hind tarsomere 1 with 1 *v*

Head brightly metallic green with pale grey pollen. Hairs and bristles on head black except middle and lower postocular bristles including postero-ventral hairs pale yellow; 1 long *vt* and several hairs present on tubercle; 1 uppermost bristle of postoculars long. Ocellar tubercle with 2 very long strong *oc* and 2 short posterior hairs. Antenna black; pedicel with circlet of short black apical bristles except 1 dorsal bristle and 1 ventral bristle relatively long; first flagellomere somewhat semicircular, nearly as long as wide; arista nearly as long as head width, subapical, blackish. Proboscis yellow with black hairs; palpus black with black hairs and 2 black thin bristles.

at extreme base. Relative length ratio of tibiae and tarsomeres; L I 3.6:4.2:1.2:1.1:0.8:0.3; L II 5.5:4.9:1.3:0.9:0.4:0.2; L III 7.20:3.90:1.40:0.75:0.45:0.30. Wing nearly hyaline with two large dark brown spots on apical half fused anteriorly, veins dark brown. Vein M1 basally curved and nearly geniculate. Crossvein m-cu nearly straight, CuAx ratio 2.0. Squama dark yellow with dark brown margin bearing blackish hairs. Halter yellow with pale yellow knob.

Abdomen metallic green with pale gray pollen. Hairs and bristles on abdomen black except those on lateral portion of tergite 1 pale yellow. Male genitalia: Epandrium relatively small, slightly longer than wide; surstylus rather short, 1/6 as long as epandrium; cercus much elongated, 7 – 8 times as long as epandrium (nearly reaching base of abdomen), basally distinctly bent.

Female. Body length 5.4 mm, wing length 5.1 mm. Similar to male, but gena with 2 strong bristles.

Holotype male, Guangxi, Nanning,

Damingshan, 29 May 2011, ZHANG Ting-Ting. Paratypes: 13 males, 1 female, same data as holotype.

Remarks. This species is similar to *C. lutheri* Frey from Sri Lanka, but can be separated from it by the abdomen without matt black spots, apical 1/6 of hind femur blackish, and halter yellow. In *C. lutheri*, the abdomen has the wide matt black spots, the knees and tarsi of legs are black, and the halter is blackish (Becker, 1922).

Etymology. The specific name refers to the type locality Damingshan.

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中国广西雅长足虻属和毛瘤长足虻属新种记述 (双翅目, 长足虻科)

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摘要 记述模式产地来自广西南宁大明山的长足虻科3新种。新种模式标本保存在中国农业大学昆虫博物馆。

1 褐端雅长足虻, 新种 *Amblypsilopus apicalis* sp. nov. (图1)

鉴别特征 跗节末端暗褐色, 尾须端部扩大, 背侧突分三叉。

正模 ♂, 广西南宁大明山, 2011-05-24, 张婷婷采。副模: 4♂♂, 3♀♀, 同正模。

词源: 新种种名意指跗节末端暗褐色。

2 指端雅长足虻, 新种 *Amblypsilopus digitatus* sp. nov. (图2)

关键词 双翅目, 长足虻科, 雅长足虻属, 毛瘤长足虻属, 新种, 中国。

中图分类号 Q969.451.3

鉴别特征 触角黄色且梗节暗褐色, 前足端跗节具特化侧毛, 尾须近指状。

正模 ♂, 广西南宁大明山, 2011-05-24, 张婷婷采。

词源: 新种种名意指尾须端指状。

3 大明山毛瘤长足虻, 新种 *Condyllostylus damingshanus* sp. nov. (图3~4)

鉴别特征 后足腿节端部浅黑色, 尾须很长, 几乎伸达腹基部。

正模 ♂, 广西南宁大明山, 2011-05-29, 张婷婷采。副模: 13♂♂, 1♀, 同正模。

词源: 新种种名意指模式产地大明山。

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